

CALIFORNIA ENERGY MARKETS

Pressures Have Eased, but Cost Risks Remain

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Audit Highlights . . .

The Department of Water Resources (department) faced an immense challenge in purchasing the net-short energy of the three investor-owned utilities. The department entered into 57 long-term contracts for power with an estimated cost of \$42.6 billion over the next 10 years. Although the energy crisis has now eased, significant cost and reliability risks remain. Specifically, we determined that:

- The speed in which the department entered into contracts in response to the crisis precluded the planning necessary for a power-purchasing program of this size. As a result, it assembled a portfolio of power contracts that presents significant risks that will need careful management to avoid increased costs to consumers.*
- The portfolio does not contain sufficient power for peak-demand periods, thus potentially exposing consumers to high market prices if energy supply becomes limited during those periods.*

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Asssembly Bill 1 of the 2001–02 First Extraordinary Session (AB IX) directed the Bureau of State Audits to conduct a financial and performance audit of the Department of Water Resources’ (department) implementation of the Purchase and Sale of Electric Power Program (power-purchasing program). The California energy crisis, which peaked between late 2000 and mid-2001, was unprecedented. Energy prices rose to all-time highs, and blackouts occurred in several instances. The State’s three largest investor-owned utilities soon experienced credit problems and had difficulty convincing energy power generators to sell electricity to them.

In response to the crisis, the Legislature authorized the department to purchase the net-short energy for the three largest investor-owned utilities. The net-short energy is the difference between the power that the investor-owned utilities provide and consumer demand, an amount that varies considerably. Through September 2001, the department spent \$10.7 billion purchasing the net short. While the department managed to provide the needed electricity, we found it was not prepared for the immense task and is still building its capacity for a power-purchasing program of this size. To reduce the State’s dependency on volatile spot market prices, the department entered 57 long-term power contracts at a total value of approximately \$42.6 billion over the next 10 years. However, the portfolio of power purchase contracts the department assembled contains cost and legal risks that must continue to be carefully managed, and most contracts do not provide the reliable power intended by AB 1X. Specifically, we found:

Finding #1: The department’s contract portfolio contains cost risks that must continue to be carefully managed.

The portfolio that the department has assembled as a response to the crisis emphasizes year-round energy but does not similarly emphasize delivery during peak demand hours. The risk in the portfolio that the department must carefully manage is that the portfolio leaves it exposed to substantial market risk in high peak

- ☑ *The majority of the contracts are not written to ensure a reliable source of power, but instead they convey lucrative financial terms upon the suppliers to ensure that energy is delivered. In addition, the terms of the contracts contain provisions that can increase the cost of power; thus they need careful management to avoid additional costs to the consumers.*
 - ☑ *The department lacks the infrastructure needed to properly manage the purchases of the net short, but is taking steps to build up its capabilities.*
 - ☑ *Many decisions need to be made about the State's future role in the power market. The department's authority to contract and purchase the net short ends after 2002, yet it or another entity will need to manage the considerable market and legal risks of the power contracts and, if the utilities are not creditworthy, purchase the net short.*
 - ☑ *Operational improvements are needed to strengthen the department's administration of the power-purchasing program.*
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demand periods if supply shortages occur and to substantial market risk with surplus contract amounts in other hours of the year. Compounding this problem is that many of the contracts are nondispatchable, meaning that the department must pay for the power whether or not it is needed. Further, based on present forecasts from the fourth quarter of 2003 through the first quarter of 2005, the department has procured more power than consumers in Southern California need. Because facilities powered by natural gas produce most of the energy for which the department contracted, the department could also have employed more tolling agreements, which would have allowed the contract price to decrease if gas prices decrease, as is predicted. However, according to the department, before receiving an opinion from the attorney general on February 28, 2001, affirming its authority, the department was not certain that AB 1X authorized it to purchase the natural gas supplies required under tolling agreements. The department is considering various mitigation strategies for these risks and the extent to which the strategies will be successful is unknown at this time.

The department's rush to obtain contracts quickly—it entered about 40 agreements with a value of \$35.9 billion in just 30 days—may have played a role in the composition of the portfolio because the department's rush precluded the planning and analysis that are necessary for developing a portfolio of this magnitude. Given the urgency to gain control of power prices and the pace that it chose in reacting to the crisis, the department had little opportunity to conduct the planning that was needed. The choice to move quickly was one of the options that the department could have taken. However, going slower may have resulted in a portfolio with fewer, or less extensive, cost risks to manage.

To effectively plan and manage the economic aspects of its portfolio, we recommended that the department gain a firm understanding of the risks contained in the portfolio. Specifically, the department should conduct within 90 days an in-depth economic assessment of its contracts and the overall supply portfolio that serves customers of the investor-owned utilities. This assessment should occur in conjunction with a legal assessment of the contract portfolio to assure that the department develops an effective overall strategy for contract management. Further, this assessment should focus on how the contracts fit into the overall supply of power and on the contract costs relative to current expectations of market conditions. The department should also establish a planning process that more directly integrates the entire portfolio of supplies serving the customers of the investor-owned utilities with the

contract portfolio. Finally, the department should develop a contract renegotiation strategy that focuses on improving the reliability and the overall performance of the portfolio.

Department Action: Partial corrective action taken.

In response to our audit report, the department states that in September 2001 it began to perform a systematic review of its contracts similar to that recommended by our report. The department further states that it has regularly evaluated the contracts for performance in accordance with the terms, comparison of the contract price to the market price, and accuracy of the invoices. The department states that this evaluation has included a comparison of the portfolio to the projected needs for the net-short energy and ancillary services based on the changing needs of consumers. In addition, the department states that in October 2001, it commenced development of a renegotiation strategy, based in part upon the systematic evaluation of the contracts noted above. Its legal counsel is assessing this evaluation, and associated actions and discussions with the department's counterparties are planned. However, as we noted in our comments on the department's response to the audit, the weaknesses in the department's approach is that it has yet to obtain a fresh set of legal eyes to review these contracts to bring an unbiased perspective to the contract renegotiations.

Finding #2: The department's power purchase contract portfolio may not always provide for the reliable power intended by AB 1X.

Most of the contracts that the department has entered with power generators do not include the terms and conditions that one would expect to see in agreements that ensure the reliable supply of energy. A key goal of AB 1X is for the department to obtain a portfolio of power contracts to supply a reliable source of power at the lowest possible cost so that the State could address the unprecedented financial and supply emergency in its electricity markets. When measuring the adequacy of the terms and conditions of the contracts, we analyzed them to determine whether the contracts assure reliable delivery of power in times of high prices and tight supply.

Our detailed review of 19 transactions, constituting 61 percent of the total gigawatts purchased, and a screening of others concluded that most of the power supplies fall under contracts with terms

and conditions that may not always assure that reliable sources of power will be available to the department. For example, under the terms of most of the contracts, the department cannot terminate the contract or assess penalties even if generators repeatedly or intentionally fail to deliver power at times when the State urgently needs power. Instead, the department can only recover the difference between the contract price and the cost of the replacement power. The right to terminate the agreements when generators repeatedly fail to deliver would have provided the department the leverage to compel generators to deliver power in times of severe need or to replace generators with other, more reliable generators.

The department's contracts also often lack terms and conditions that would better ensure other reliability goals of the contracting effort. For example, they lack provisions that would better ensure that generators are making appropriate progress on building the facilities that will supply the power for which the department has contracted and allowing the department to inspect facilities that the generators say are unable to produce power because of mechanical difficulties. Moreover, the contracts may not always ensure that when the State pays a premium for construction of new generating facilities, the new construction occurs and the generators actually make available and deliver the power produced by the new facilities.

Although the department was in a weak bargaining position because of the financial crisis in the electricity markets, its rush to ease the electricity crisis by locking in power supply through long-term contracts weakened its position even further. In its request for bids, the department did not request contract terms and conditions that are standard in the power industry for entities that must ensure reliable delivery of power. We found that in later contracts sellers agreed to terms and conditions that better assure reliable power delivery. Because the department apparently did not ask for certain reliability terms recognized by the power industry until after it had made the bulk of the deals, we cannot determine whether the department would have been able to obtain more favorable reliability terms in the earlier long-term contracts. We did note that while the terms and conditions improved in the long-term contracts negotiated after March 2001, the department negotiated the vast majority of the power, costing \$35.9 billion, before March 2, 2001, during the period in which we found that the terms and conditions regarding reliability of power delivery were least favorable to the State.

Finally, another concern is that the contract costs are not fixed and could rise substantially if the department does not manage its legal risk in anticipation of exposure to potential liabilities and to defaults by energy sellers. For example, the department needs to guard against potential events of default that could expose the State to huge early termination payments. Also, the department needs to protect itself from generator costs that the contracts have shifted to the department. Such costs could include governmental charges, environmental compliance fees, scheduling imbalance penalties, and gas imbalance charges.

We recommended that the department undertake actions to anticipate and manage its legal risk in its contracts. Specifically, to ensure that the department can develop an effective strategy for managing these contracts, it should perform within 90 days in-depth assessments of its legal risk and legal services requirements. Further, to make certain that its legal assessment and representation is on par with those of the other parties participating in the contracts, the department should establish an ongoing legal services function that specializes in power contract management, negotiation, and litigation. When necessary to avoid conflicts, this legal function should be distinct from counsel retained to sell bonds or provide legal advice to the State Water Project. Finally, it should investigate all audit and other rights available to the department under the contracts to assure that it can develop a proper program to enforce the power suppliers' performance.

Department Action: Partial corrective action taken.

The department reports that since September 2001 it has added six additional legal counsel to its team, including three additional internal counsel reassigned from other duties and three outside counsel. These attorneys have the responsibility for evaluation of contract compliance, assessment of the rights of the department under the contracts, and acting as litigation specialists in the event of challenge by counterparties. However, as we noted in our comments on the department's response to the audit, the weaknesses in the department's approach is that it has yet to obtain a fresh set of legal eyes to review these contracts, who would bring an unbiased perspective to the contract evaluation.

Finding #3: The department lacked the infrastructure to carry out the power-purchasing program.

Once the department became responsible for the net short, it began purchasing up to 200,000 megawatts of electricity each day. Through September 2001 the department spent approximately \$10.7 billion on transactions for short-term power agreements. However, various factors hampered the department's efforts in its new role, including a dysfunctional market and a lack of infrastructure and experienced, skilled staff. In addition, the department is still developing systems for working with the investor-owned utilities to forecast demand, schedule the least-cost available power, and manage the delivery risks. Consequently, at the same time that the department struggled with purchasing needed power, it also struggled to establish the organization it would need to meet the challenge.

The department also still needs to resolve settlement process problems associated with the energy and ancillary services functions that the department has been conducting and continues to conduct on behalf of the California Independent System Operator (ISO). This resolution is important because under a recent Federal Energy Regulatory Commission (FERC) order, the failure of the department and the ISO to reach agreement on how to facilitate the payment of long-outstanding power obligations may disrupt the future supply of available power in the ISO's short-term markets.

We recommended that the department fully staff the power-purchasing program and consider staffing approaches, including hiring additional consultants and contractors if needed, to assure that personnel shortages do not continue to hinder its operations. In addition, we recommended that the department enhance its skills for market analysis and contract management to properly address the implications of uncertainty on contract portfolio management and power dispatch decisions. The department also needs to develop a transition plan for the orderly transfer of the short-term purchasing and net-short management functions to other entities. Further, it needs to collaborate with the investor-owned utilities to share information about generation sources to ensure the least-cost dispatch of power. As part of this effort, the department should coordinate with the investor-owned utilities and the California Public Utilities Commission (CPUC) to ensure that the rate incentives associated with utility-retained generation scheduling are resolved to support the dispatch of the lowest cost energy. Finally, the department should collaborate with market

participants to resolve settlement process problems associated with the energy and ancillary services functions that the department conducts on behalf of the ISO.



Department Action: Partial corrective action taken.

The department states it is committed to working with the investor-owned utilities, ISO, and the CPUC to develop the proper incentives for the utilities to dispatch power in a manner which those power resources and the department's contracted supply can be reasonably optimized. The department reports that it began working with market participants to resolve payments related to the settlement process and had reached a tentative agreement with the parties involved. However, these efforts were negated by a November 2001 FERC order that required the ISO to bill the department for the settlement payments. As a result, the department believes it will need to continue working with market participants to resolve this issue. The department's response did not address our recommendations regarding the need for a transition plan for the short-term purchasing function or the need to address its staffing and infrastructure weaknesses.

Finding #4: Many decisions are needed regarding the future role of the State in the power market.

The governor, the Legislature, and the department need to make many decisions about the future role of the State in the power market. Now that the crisis has eased, the Legislature and the governor should consider how best to serve the power requirements of the State's consumers over the long term and how best to manage the costs and mitigate the risks of the power contracts. A plan for the State's future role in the power markets is necessary regardless of whether the department continues to manage the program or whether the program becomes a separate state agency or a different type of governmental entity.

The Legislature will also need to evaluate whether to extend the department's responsibilities beyond January 1, 2003, to allow time for present uncertainties that affect these decisions—such as the financial health of the investor-owned utilities and the role of the new state power authority—to be resolved. Other relevant factors that decision makers must consider include the fact that current long-term contracts do not permit the State to renegotiate or quit contracts that become burdensome or unfavorable and whether the department can assign contracts to other entities. Further, the

Legislature needs to take into account the ability of the administering entity to protect the interests of power programs before regulatory bodies to minimize regulatory risks. Even though the CPUC and FERC do not directly regulate the department, their actions have substantial bearing on the market within which the department operates, the load and services for which the department is responsible, and the collection of revenue. Thus, the department needs to actively manage the regulatory risks that result from CPUC and FERC actions. In addition, the department still needs authority to enter financial transactions to manage gas and electric transaction risks.

We recommended that the Legislature and governor consider developing a comprehensive, long-term strategic framework for the electricity industry in the State and for the department's role in that system. We also recommended that the Legislature consider extending the department's purchasing authority to allow time for the development and implementation of a strategic framework and to assure continuity of the purchasing authority and an effective transition, presumably back to the investor-owned utilities.

Additionally, we recommended that the department develop a strategic plan for the future of the power-purchasing program, including an assessment of the transition processes needed to allow orderly transfer of functions to the ISO, the investor-owned utilities, and others, as appropriate. The department should also continue its efforts to coordinate work with the newly created power authority to clearly establish their respective roles and responsibilities. In its future efforts to protect the interests of the power-purchasing program, the department should retain independent counsel to advise it on matters relating to state and federal regulatory issues. Further, the department should perform a comprehensive assessment of its collaboration with the attorney general, the Electricity Oversight Board, the CPUC, and other state entities to ensure that the interests of the power-purchasing program are distinctly and adequately represented in regulatory proceedings. Finally, we recommended that the department seek clear statutory authority to use financial instruments to manage natural gas and electric gas risks.



Department Action: Partial corrective action taken.

The department states that it has already commenced a program to assure timely transition of its power-purchasing role to others. It assumes that the investor-owned utilities will resume the obligation to purchase the net short when they become creditworthy, the timing of which is uncertain. The department further states that the CPUC has initiated a proceeding to address the process for returning the role of purchasing the net short to the investor-owned utilities and that it is cooperating with the CPUC staff in this effort. In regards to actively managing regulatory risks, the department reports it already has multiple legal firms providing advice on state and federal regulatory matters. The department agrees that it should gain clear authority to use financial instruments to manage gas and electricity risks and indicates that it is in the process of obtaining legal clarification of the existing statutory authority included in AB 1X from the attorney general. The department's response did not address how it would clarify its and the power authority's roles and responsibilities.

Finding #5: The department needs to improve other capabilities in its administration of the power-purchasing program.

We noted that the department needed to make other improvements in its administration of the power-purchasing program. Specifically, we observed the following:

- Although the department has entered into servicing agreements with the investor-owned utilities, it lacks processes to evaluate their performance in estimating consumer demand for power and the department has not developed procedures for how to exercise its auditing rights or to obtain reports from the investor-owned utilities. In addition, the department and the investor-owned utilities have not agreed to share market data, which would assist the department in carrying out its purchasing function.
- Although the department has taken steps to prevent conflicts of interest among its consultants and has implemented a policy that requires them to file the State's standard form for disclosure of economic interests, its process has not accounted for all consultants working on the power-purchasing program.

- The department’s internal controls were not adequate to ensure that all charges to the power-purchasing program were valid. Further, when the department identified errors, it failed to completely correct the errors. For example, we identified approximately 14,300 hours for which department staff worked on the program, but for which no payroll costs were charged to the program. However, the department only corrected charges for approximately 4,300 hours.

To address these concerns, we recommended that the department take the following actions:

- The department should amend the servicing agreements to include language that promotes accuracy in the investor-owned utilities’ estimates of consumer power needs. It should also develop audit procedures to monitor the investor-owned utilities’ performance of critical elements of the servicing agreements, such as remittance of cash, allocation of the power the department purchases, and the cost of energy conservation programs. The independent auditors of the investor-owned utilities should perform these audit procedures.
- To help ensure that its consultants do not have potential conflicts of interest, the department should continue its efforts to review potential conflicts of interest among all employees and consultants twice each year and retain a record of its review.
- The department should improve its internal controls to ensure that only appropriate costs are charged to the power-purchasing program and that these costs are supported by evidence of service.



Department Action: Partial corrective action taken.
Regarding conflict of interests, the department indicated during the audit that it had begun another review of its consultants to ensure that those required to file economic interest forms have done so. The department’s response to the audit report did not address our recommendations over the servicing agreements with investor-owned utilities or for improving internal controls over charges to the power-purchasing program.